plains by the transformation of bilirubine into biliverdine in the presence of Hg_2O (corrosive sublimate) into which calomel is, in part at least, converted, after entering the intestine. From this point of view, then, the so-called calomel stools are not the result of a cholagogue action.

CALOMEL AS A DIURETIC.

M. JENDRÁSSIK reports (*Deutsches Archiv für klin. Med.*, 1886) the results obtained from the combined action of calomel and jalap—from two to four grains, of each, three or four times a day. From the second to the fourth day the diuresis begins, and is very active, the amount of urine surpassing the diuretic action of digitalis. The quantity of urine voided increased for several days, and after the maximum, gradually lessens to the normal. By this time mercurial salivation has occurred to some extent, but less than if the jalap had not been given. It is asserted by Jendrássik that any purgative action lessens the diuretic.

In attempting to explain the action, he makes no mention of the resin of jalap, which is a stimulating diuretic of considerable power, nor does he refer to the reflex influence proceeding from the intestine.

MEDICINE.

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THE VALUE OF SUDORAL ERUPTIONS AS A PROGNOSTIC SIGN IN TYPHOID.

LACAZE (*Revue de Médecine*, 1887, p. 270), after a definition of sudamina and miliaria, and numerous extracts from the literature of the subject, concludes that the sudaminal eruptions which appear before the commencement of the second week of typhoid fever have no value in determining the duration or the prognosis of the malady; while those coming after the second week, during the doubtful period, are almost always the sign of the commencement of full convalescence.

ON A METHOD OF PROPHYLAXIS AND AN INVESTIGATION INTO THE NATURE OF THE CONTAGION OF SCARLET FEVER.

JAMIESON and EDINGTON (*British Medical Journal*, 1887, 1, 1262) publish a valuable article on this subject, accompanied by a colored plate. It is acknowledged that scarlet fever is but little communicable in its early stages, and that the exhalations from the mouth, and the flakes of skin, contain the active contagium. Jamieson has previously expressed the view that it is probably a parasitic organism, and that when inhaled or swallowed, it finally, in the course of the disease, reaches the skin from the blood, and, ripening there, is ready for immediate multiplication in the body of some other individual. In accordance with this theory, he endeavored to prove by experiment that it is possible to prevent the spread of the disease even to persons in close contact with the patient. For this purpose he made frequent applications to the throat of a strong solution of borax in glycerine; while to disinfect the skin, warm baths were employed every night from the beginning, and a mixture of carbolic acid, 30 grains; thymol, 10 grains; vaseline, 1 drachm; simple ointment, 2 ounces, was rubbed over the entire body night and morning. In this way, he reasoned, the scales would never become contagious.

The experience of the last three years completely bears out the correctness of this opinion. He reports a series of cases going to prove that the treatment mentioned decidedly lessens the danger of the spread of the disease. He also quotes some cases to show that the late desquamation contains the contagium in the largest amount; indicating that air is necessary for its maturation, since it is then that the cuticle is more fully separated, dried, and oxygenated.

The following lines of investigation were now to be carried out:

1. To discover the organism on which the virulence of the epithelial flakes depends.
2. To ascertain at what period it first appears.
3. To determine whether the clinical methods employed as described for neutralizing the contagiousness of scarlet fever are actually capable of killing it.

This, the bacterial part of the investigation, was carried out by Edington. He details the very careful methods of research adopted, with the numerous precautions taken. He could find no microbes in the epithelial scales themselves, and it is probable that only spores are to be found here; but he describes and figures several species of bacilli and micrococci obtained in cultures from the blood and scales. Experiments show, however, that there is but one, the *bacillus scarlatinæ*, which seems to be truly pathogenic. This bacillus is 4 μ in thickness, and 1.2 μ–1.4 μ in length; motile, and occurring in long, jointed filaments. On gelatine plates it forms points of liquefaction after several days. It rapidly liquefies Koch's jelly tubes, but with no distinct growth-formation, and develops a characteristic pellicle after the liquefaction is well advanced. In fluid broth it forms a coherent, parchment-like pellicle within four hours, which later exhibits a deep wrinkling, due to a dense network of bacillary filaments. It was found in every tube but one (this exception being a tube broken early in the experiment), if started after the end of the third week, but never before this time. It was also detected in every culture tube made from the blood, if taken before the third day of the fever. When rabbits are inoculated with it, it produces fever and an erythema, followed by a slight desquamation; and the bacilli can be reobtained from the animal's blood. The effects in guinea-pigs are similar, but the desquamation is more abundant, and the flakes thicker. In calves, the skin of the thorax becomes red, and an erythema develops; there is fever, and later desquamation.

Regarding the third question, Edington found that of seven cases in which the treatment had been continued until the seventeenth day, the part being then wrapped in sterilized cotton-wool until the thirtieth day, and then examined for the presence of bacilli, none were present in five cases, and the cultures developed very slowly in the other two.

It seems then proven that the *bacillus scarlatinæ* is the specific cause of scarlet fever, and that the other microbes found are only concomitants. Yet one, which they call *diplococcus scarlatinæ sanguinis*, occurs very frequently with the bacillus, both in cultures from the blood and from the epithelium. It cannot as yet be definitely settled whether it modifies in any way the action of the bacillus. It is a fact that both organisms were found from the first in those cases which exhibited an extremely vivid and widespread eruption.

Hemiplegia in Children.

Abercrombie (*British Medical Journal*, 1887, 1, 1323) says, that while all forms of paralysis in children were formerly grouped under the head of essential spinal paralysis, it is undoubtedly true that very many cases are due to a cerebral cause. The causes of hemiplegia in adults are hemorrhage, arterial obstruction, and tumors; and all these may be active in children. Cerebral hemorrhage in infants must be exceedingly rare. The only known causes of it are purpura hemorrhagica, the hemorrhagic diathesis, and aneurisms of the cerebral vessels; and, in a few instances, a highly vascular sarcoma has given rise to a large extravasation of blood. Meningeal and capillary hemorrhages may also occur, and it is conceivable that whooping-cough might also produce massive hemorrhage, though the author has never seen a case. Arterial obstruction from embolism due to heart disease, is occasionally met with, and it is strange that it is not oftener seen. Thrombosis may take place, brought about by previously existing disease of the vessels; syphilis probably causing hemiplegia in this way. Tumors are not uncommon, usually in the pons or crus. It must be also mentioned that tubercular meningitis not unfrequently produces unilateral paralysis.

But the author has observed some fifty cases of hemiplegia in children, only a few of which could be accounted for by any of the causes mentioned. The others may be divided into *two groups*—those which followed one of the acute infectious diseases, and a much larger group where no such cause could be assigned. In the first group hemiplegia oftenest succeeded diphtheria in the author's experience, though he has also seen it four times after measles, once after whooping-cough, and once after scarlet fever. In the second group there was evidence of congenital syphilis in four patients, and the other cases fall naturally into three classes, *i. e.*—(*a*) traumatic; (*b*) congenital; (*c*) neither traumatic nor congenital, nor due to any of the causes already described.

Traumatism during labor has undoubtedly been the cause of hemiplegia in some instances, but the author has seen only one case which was probably due to injury—that of a child who had fallen upon his head. He has also seen only four cases in which the paralysis could be called congenital. The last class of cases can only be subdivided into those occurring under two years of age, and those developing after that age. The first subdivision contains essentially the cases of infantile cerebral paralysis, and the author has the notes of fourteen of them, ten of which were in girls. The intellect was